

A Note on Very High Specific Gravity of the Urine in Healthy Women.

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A NOTE ON VERY HIGH SPECIFIC GRAVITY OF THE URINE IN HEALTHY WOMEN.

THOUGH the following note refers to a subject which is by no means new, there seems to be too little stress laid upon certain normal differences which are apt to be observed between the urines of women upon the one hand and of men upon the other. When one is confronted in a case of examination for life insurance with a urine the specific gravity of which is 1040, one is at first inclined to think that the person who passed that urine must be abnormal, and not unnaturally one tests that urine with extreme care for sugar. The fact that specific gravities of 1035 or even 1040 may occur without there being anything the matter with the person at all is difficult to convince oneself of, until one has seen a number of cases. Such cases, however, do not seem to be very uncommon amongst women. The following instances occurred in the course of examining 150 apparently healthy nurses. In no case was any sugar to be detected in the urine, either by Fehling's or by the phenyl-hydrazine test.

One obvious suggestion is that a high specific gravity of this kind must indicate that the person is drinking far too little fluid, and is therefore passing a very concentrated urine. This is doubtless true to some extent, but it is not entirely true that if a woman drinks a normal amount of fluid per diem she will necessarily have a urinary specific gravity of 1025 or less; for whenever a nurse has been found to have a specific gravity at first examination of

over 1030, she has been urged to drink fluids to the extent of at least three pints per diem, and the fluid taken daily has been observed by the sisters in the Nurses' Home. Sometimes the specific gravity of the urine has fallen at once, but by no means always has it become as low as one might have expected. That there was really no disease in these cases has been confirmed by their subsequent course, the nurses in question having remained perfectly well.

Urinary specific gravities of this kind do not occur to any similar extent, I think, amongst men; but, particularly from the point of view of life insurance, it is worthy of note that a specific gravity even up to 1040 is by no means necessarily an evidence of ill health in a woman. It might be added that in the earlier cases it was thought that there must be some error in the recording instruments; but this source of fallacy was excluded by the use of several different urinometers, each of which was tested separately; all recorded similar results for the same urine.

The following cases indicate that it is by no means in hot summer weather only that the high specific gravities occurred:

NURSE LO.

Date of Observation.	Sp. Gr. of Urine.	Date of Observation.	Sp. Gr. of Urine.
September 6th	... 1040	February 22nd	... 1040
September 20th	... 1040	May 12th	... 1036
September 30th	... 1036	May 25th	... 1030
October 14th ...	... 1034	July 28th	... 1044
October 29th ...	... 1040	October 7th	... 1030
November 1st ...	... 1040	October 29th	... 1034
November 19th	... 1034	December 10th	... 1032
December 3rd ...	... 1036	February 4th	... 1034
January 20th ...	... 1028		

NURSE HW.

September 10th	... 1038	May 11th	... 1030
September 15th	... 1036	May 25th	... 1035
September 30th	... 1036	June 17th	... 1028
October 14th ...	... 1030	June 26th	... 1030
October 29th ...	... 1030	July 28th	... 1034
November 1st ...	... 1030	August 16th	... 1020
November 19th	... 1024	October 7th	... 1035
December 3rd ...	... 1025	October 29th	... 1030
January 31st ...	... 1030	December 10th	... 1034
February	... 1030	February 5th	... 1031
March ...	... 1032		

NURSE MY.

Date of Observation.	Sp. Gr. of Urine.	Date of Observation.	Sp. Gr. of Urine.
November 1st...	... 1040	May 11th ...	... 1025
November 19th ...	... 1015	May 25th ...	... 1030
December 3rd ...	... 1030	July 28th ...	... 1028
January 31st ...	... 1015	October 7th ...	... 1018
February 14th...	... 1028	October 29th ...	... 1020
February 21st ...	... 1024		

NURSE SP.

November 21st ...	... 1034	February 14th...	... 1020
December 3rd...	... 1038	February 21st...	... 1020
January 31st ...	... 1034	May 11th ...	... 1024

NURSE CA.

November 20th ...	... 1030	May 11th ...	... 1020
December 3rd ...	... 1030	May 25th ...	... 1028
January 31st ...	... 1025	June 12th ...	... 1034
February 14th...	... 1020	June 26th ...	... 1025
February 21st ...	... 1020	August 12th ...	... 1020
June 17th ...	... 1040	October 30th ...	... 1020
July 28th ...	... 1026	February 5th ...	... 1024

NURSE RE.

November 20th ...	... 1032	May 26th ...	... 1010
December 3rd ...	... 1028	June 26th ...	... 1020
February 7th ...	... 1030	August 12th ...	... 1034
February 24th...	... 1030	February 5th ...	... 1033
May 12th ...	... 1012		

NURSE LA.

December 6th...	... 1040	June 12th ...	... 1035
February 21st...	... 1010	June 30th ...	... 1034
March 19th ...	... 1030	July 28th ...	... 1035
April 17th ...	... 1038	August 16th ...	... 1035
May 12th ...	... 1035	October 30th ...	... 1025
May 26th ...	... 1038	March 30th ...	... 1025

NURSE PR.

January 17th ...	... 1034	August 16th ...	... 1032
February 27th...	... 1035	February 3rd ...	... 1024
May 26th ...	... 1035	March 30th ...	... 1028
July 28th ...	... 1035		

NURSE MU.

April 24th ...	... 1040	August 12th ...	... 1032
May 12th ...	... 1032	October 7th ...	... 1035
June 12th ...	... 1036	December 10th ...	... 1028
June 28th ...	... 1030	February 5th ...	... 1034
July 28th ...	... 1035	March 30th ...	... 1027

NURSE IL.

Date of Observation.	Sp. Gr. of Urine.	Date of Observation.	Sp. Gr. of Urine.
October 13th ...	... 1033	February 5th ...	... 1034
October 30th ...	... 1020	March 30th ...	... 1033
December 10th	... 1035		

NURSE MA.

June 12th ...	... 1035	October 7th ...	... 1020
July 28th ...	... 1035	October 30th ...	... 1024
August 12th ...	... 1035	December 10th	... 1020

NURSE WA.

June 12th ...	... 1036	August 12th ...	... 1035
July 28th ...	... 1040		

NURSE NE.

June 12th ...	... 1035	October 7th ...	... 1024
June 28th ...	... 1040	October 29th ...	... 1020
July 28th ...	... 1034	February 5th ...	... 1024
August 12th ...	... 1035		